UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,653	11/30/2000	Fabrice Banctel	Q61879	5626

7590 05/10/2004		EXAMINER
Sughrue Mion Zinn		PATEL, HARESH N

Sughrue Mion Zinn
Macpeak & Seas
Suite 800
2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/701,653	BANCTEL ET AL.
	Examiner	Art Unit	
	Haresh Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 February 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-9_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-9_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☒ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____ .

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   5)☐ Notice of Informal Patent Application (PTO-152)

    Paper No(s)/Mail Date _____.   6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-9 are presented for examination.

Priority

2.   Applicant is requested to submit the translated certified copy of the foreign priority document.

Specification

3.   The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
       DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
       COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program
       listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables
       having more than 50 pages of text are permitted to be submitted on compact
       discs.) or
       REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).
       "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
       (1) Field of the Invention.
       (2) Description of Related Art including information disclosed under 37 CFR 1.97
       and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence
     Listing" is required on paper if the application discloses a nucleotide or amino
     acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence
     Listing" is not submitted as an electronic document on compact disc).

The disclosure is objected. Some of the informalities are:

    i.   The specification needs to be organized as stated above. Examiner makes

a note that applicant has mentioned about the preliminary amendment filed on

November 30, 2000 with the organized specification. However, no preliminary

amendment is available to examiner for examining, examiner requests applicant

to submit the organized specification without any new additional matters.

Appropriate correction is required.

Drawings

4.   Figure 1 labeled as --Prior Art—has been acknowledged by the examiner.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Rich et al.

6,457,065 (Hereinafter Rich), as disclosed in the non-final action paper number 4 mailed on

11/20/03.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rich in view of

applicant's admitted prior art (AAPA), as disclosed in the non-final action paper number 4

mailed on 11/20/03.

Response to Arguments

9.   Applicant's arguments filed 2/27/04 have been fully considered but they are not

persuasive.

Applicant argues (1) Rich does not disclose "central directory adapted to store

information on objects in a data structure at the root of the tree". The examiner disagrees in

response to applicant's arguments. Rick teaches every node of the tree structure, i.e., including a

root of the tree, using persistent object storage to store information of the objects, col. 3, lines

13-37. Rick also teaches usage of a directory/path mechanism, i.e., central directory, to retain

information on the objects, for example, top-level transaction information, col. 9, lines 3 - 67.

Therefore Rich meets the claim limitation of "central directory adapted to store information on

objects in a data structure at the root of the tree". It is noted that the claimed subject matter only

discloses a central directory, which can be any directory/path dealing with some other objects

and having no relation to the applicant's intended implementation of a tree for distributed objects

within several processes. Therefore examiner believes the reference teaches the limitation as

disclosed above.

Applicant argues (2) Rich does not disclose "assigning to a father object in a process, for

each son object, "information referring back to said central directory if the son object is not

contained in the same process". The examiner disagrees in response to applicant's arguments.

Rick teaches every node of the tree structure, i.e., including a root of the tree, using persistent

object storage to store information of the objects, col. 3, lines 13-37. Rick also teaches usage of

a directory/path mechanism, i.e., central directory, to retain information on the objects, for

example, top-level transaction information, col. 9, lines 3 - 67. Rich also teaches a node for

multiple transactions in which a node can be a parent for some transactions while being a child

for other transactions. The parent/child node uses of directory/path mechanism to retain

information on the objects and to refer the directory/path to support the transaction. The

verification of whether a child/parent node in the same process is performed by the code

executing on the server and client nodes. col. 9, lines 3 – 67. Therefore Rich meets the claim

limitation of "assigning to a father object in a process, for each son object, "information referring

back to said central directory if the son object is not contained in the same process". It is noted

that the claimed subject matter only discloses a central directory, which can be any

directory/path dealing with some other objects and having no relation to the applicant's intended

implementation of a tree for distributed objects within several processes. The different processes

can be any processes or a single process and not limited to several distributed processes. The

distributed objects may not need to be distributed at all. The father object can be a son of the son

object or the son object itself. The assignment of the father object in a process can be any

process and not limited to the distributed processes. Therefore examiner believes the reference

teaches the limitation as disclosed above.

Applicant argues (3) Rich does not disclose "a central directory in a data structure at the

root of the tree". The examiner disagrees. In response to applicant's argument that the references

fail to show certain features of applicant's invention, it is noted that the features upon which

applicant relies (i.e., "a central directory in a data structure at the root of the tree") are not recited

in the rejected claim(s). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988

F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Secondly, the claims do not specify how a central

directory is different than a normal directory/path. The claimed central directory can deal with

any objects and not limited to the distributed objects. The central directory with relation to a

data structure can be virtual or in any other means but not limited to within the data structure.

Therefore the rejection in maintained as disclosed above.

Applicant argues (4) Rich does not disclose "central directory adapted to store

information on objects in a data structure at the root of the tree. Applicant submits that there is

no such corresponding component in Rich, and therefore Rich does not anticipate the claimed

invention as set forth in claim 7". The examiner disagrees in response to applicant's arguments.

Please refer to the above-mentioned examiner response of the argument (1). Therefore examiner

believes the reference teaches the limitation as disclosed above.

Applicant argues (5) Rich does not disclose "limitation of claim 2, i.e., if said logical

name is not in the central directory, the central directory searches its data structure for a logical

name with the longest character string equal to a first part of the character string of the logical

name received, in order to send to a father object, the request relating to the first object". The

examiner disagrees in response to applicant's arguments. Please refer to the above-mentioned

examiner response of the arguments (1) and (2). Also Rich teaches the logical transaction model

for a replicated distributed object system, forms a tree of nested transactions. A physical node

may have nodes of transaction trees for multiple transactions, and may be a parent for some

transactions while being a child for other transactions. The present invention uses these nested

transaction trees to manage changes to the replicas, as well as actual changes to the remote

objects in the persistent store, resulting from one or more concurrent and/or nested transactions.

(Note that the present invention may be used in a computing system specifically designed for use

with the present invention, or it may be used in a more general transactional system by making

appropriate modifications to the code executing on the server and client nodes, col. 9, line 1 –

col. 22, line 47. Therefore examiner believes the reference teaches the limitation as disclosed above.

Applicant argues (6) Rich does not disclose "limitation of claim 4, i.e., the central directory manages the redundancy of the processes by selecting one of several processes containing the requested object". The examiner disagrees in response to applicant's arguments. Please refer to the above-mentioned examiner response of the arguments (1) and (2). Also Rich teaches multiple nested transactions may be managed according to the approach and structure defined in the first related invention. A shared transaction 510 is provided at the top of the tree. One such shared transaction exists at all times within an application using the present invention when this optional optimization is implemented. Otherwise, when this optimization is not used, each top-level transaction has a separate tree structure. Both transactions 520 and 570 are top-level transactions. Within the type of complex business application typically found in an enterprise-computing environment, there may be many more than two top-level transactions. Whenever a new top-level transaction is created within the application, it becomes a child of the shared transaction 510. When a top-level transaction completes by either committing or rolling back, it is removed from the transaction tree 500, so that the shared transaction 510 has one less child. The subtree structures shown in FIG. 5 beneath the two top-level transactions. Subtrees correspond to the child transactions within a transaction as previously stated, and thus may be nested to an arbitrary depth, with an arbitrary width, or there may be no subtrees beneath a top-level transaction, col. 13, lines 29 – col., 14, line 19. Therefore examiner believes the reference teaches the limitation as disclosed above.

Applicant argues (7) Rich does not disclose "limitation of claim 9, i.e., the AAPA does

not make up for the deficiencies of Rich. The examiner disagrees in response to applicant's

arguments. Please refer to the above-mentioned examiner response of the arguments (1) and (2)

for the teachings of Rich. AAPA clearly teaches that any distributed object system is based on

an ORB, DCOM ORB, page 3, lines 13 - 17. By combining the teachings of Rich with the

teachings of AAPA, the implementation of a tree of distributed objects can be done in a DCOM

type environment. Therefore examiner believes the reference teaches the limitation as disclosed

above.

Conclusion

Examiner makes a note that applicant has mentioned about the preliminary amendment

filed on November 30, 2000. However, no preliminary amendment has been available to

examiner for examining. Applicant may submit organized specification without any new

additional matters.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The

examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to

8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee, can be reached at (703) 305-8498.

The appropriate fax phone number for the organization where this application or

proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Haresh Patel

May 3, 2004

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100